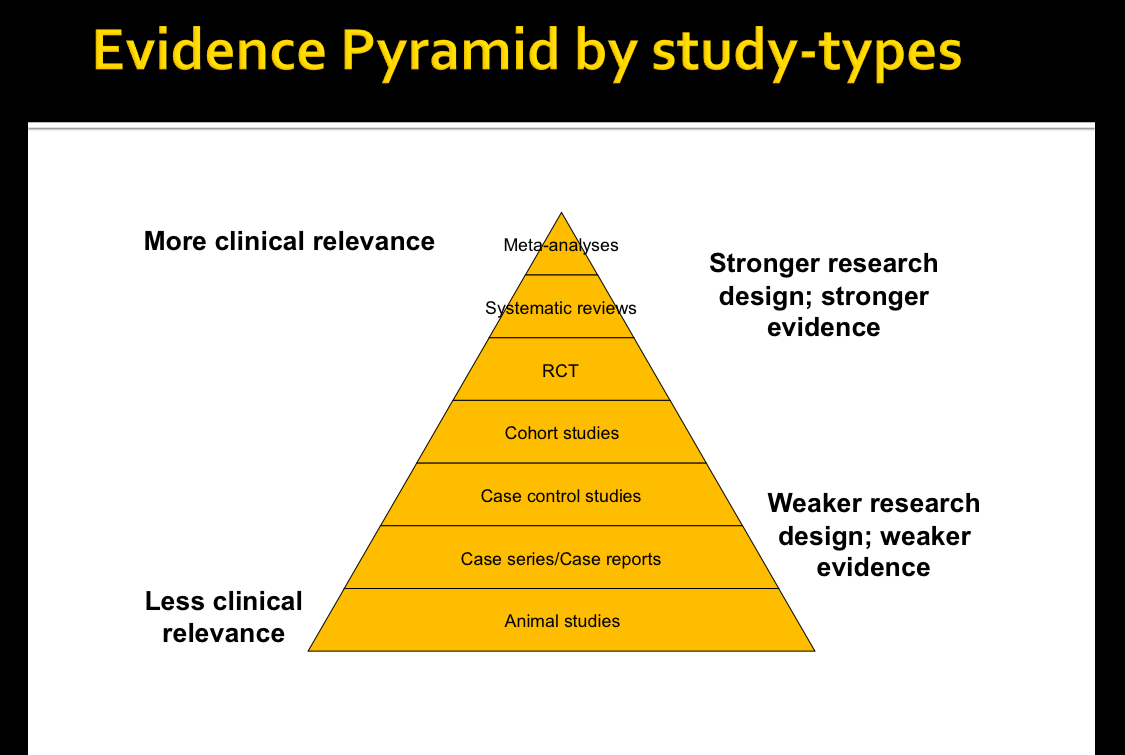
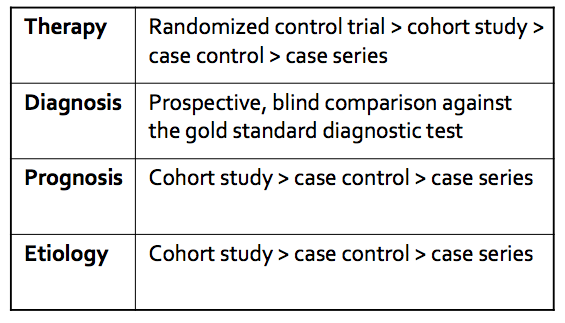
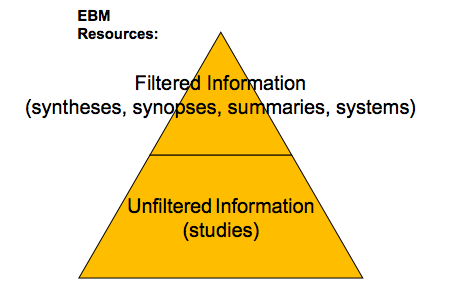
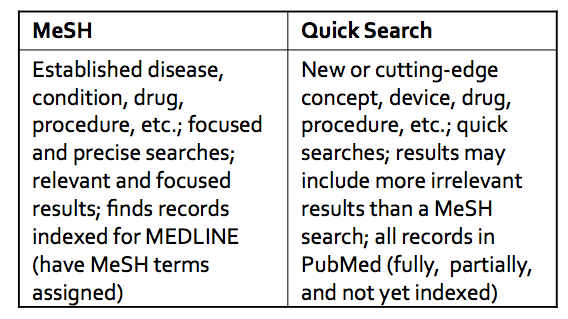
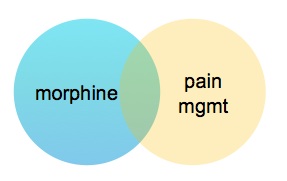
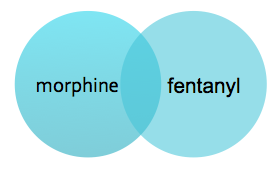
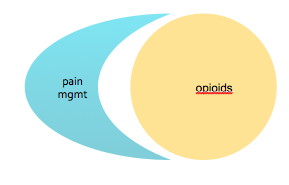
Evidence Based Medicine Lecture 2: Searching at UT for the Best Evidence

* EBM 5: Ask, Acquire, Appraise, Apply, Evaluate
  + Construct an answerable clinical question based on a scenario, using PICO
    - Ask the right question! Question type determines the best type of resource/research design to answer the question
    - Question continuum: general background questions (novice level) 🡪 specific foreground questions (expert level)
    - Background questions: When you’re new to something (a novice), you ask a lot of background questions because novices don’t know enough to formulate a foreground question. Examples include: normal/abnormal lab values, DOC, therapies. Good resources for background questions: medical textbooks (MD consult, Access Medicine & Access Surgery, STATRef), Point of care systems (UpToDate, DynaMed, eMedicine), Drug Information systems (Micromedex), and Google! Background question example: What part of the pathology of this disease makes the patient show these signs and symptoms?
    - Foreground questions: An expert rarely has to ask background questions bc he knows the answers to them. Good resources for foreground questions: research-based articles, systematic reviews, meta-analyses, etc. Ex: In patients diagnosed with this disease, is drug A or drug B better in terms of improving the patients’ quality of life?
      * Types of Foreground Questions:
        + **Therapy** – what is the best treatment option for this situation?
        + **Diagnosis** – what test is best suited for this situation?
        + **Prognosis** – what is the course of this disease over time? what are the possible outcomes?
        + **Etiology** – what are the causes of this disease?
        + **Prevention** – what are the risk factors for this disease? Can they be modified with an intervention?
        + **Cost-effectiveness** – is one therapy more cost-effective than another?
        + **Quality of life** – does one intervention increase the patient’s quality of life more than other interventions?
  + Pico for Question Development:
    - * **P** – patient/population
      * **I** – Intervention (or could be prognostic factor or exposure)
      * **C** – comparison (if there is one)
      * **O**– outcome (what are you measuring: could be a lab measure, QOL measure, cure rate, weeks of remission, etc.)
      * **SAMPLE**: In older women, does adding Lipitor reduce the likelihood of developing Alzheimer disease or cognitive problems?
        + P – older female, in good health
        + I – Lipitor
        + C – not taking Lipitor
        + O – development of Alzheimer disease or cognitive problems
  + Identify levels of evidence appropriate for clinical questions:
    - Levels of Evidence:



* + - Based on your question which type of studies are you going to look for?
      * 
  + Identify information resources for EBM
    - 
      * **Filtered:** DynaMed, UpToDate, Cochrane Library, ACP Pier
      * **Unfiltered:** PubMed, etc
  + Apply advanced search strategies in PubMed to conduct a focused literature search: PubMed is a version of MEDLINE
    - There are 2 main ways of searching: Quick search using search box – general search & MeSH (Medical Subject Headings) search
    - **Quick Search:** Good for general searches. It’s comparable to a Google search (searches the term or phrase entered) but also includes relevant MeSH terms. You may need to search for synonyms.
      * **\***Great for terms not represented with MeSH terms (like new drugs, devices, or procedures) and to find very current references
    - **MeSH Search:** Medical Subject Headings – controlled subject tags
      * MeSH terms are arranged hierarchically: narrower terms-broader terms; also has related terms to help us pick the best term(s)
      * Automatically includes narrower terms
      * Can restrict to references with the MeSH term as the main point of the article
      * Can select subheadings to narrow focus
    - Quick Search vs. MeSH:
      * 
    - Search Tools: Using AND, OR, NOT
      * **AND-** Search narrowed to find records that include BOTH sets  (the green area)
      * **OR-** Broadens search to records that are include one set or the other
      * **NOT-** Narrows search to records in the first set, but not the other; order of sets makes a difference(pain mgmt NOT opiods- blue only)
* Getting help at Mulford- The reference librarians are there to help!
* 419-383-4218, [MulfordReference@utoledo.edu](mailto:MulfordReference@utoledo.edu), Stop in M-F, 10 am-5 pm